



ECS Architecture Overview

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Presentation Approach

System Architecture Overview

- Requirements/Features
- Subsystem software/hardware functionality mapping

Key Design Changes since IDR

- Key Mechanisms
- ESQ

Collection Evolution - An End-to-End Scenario

- Based on an community scenario
- Emphasizes new release B features
- Focus on Science Operations



System Architecture Overview

- **Release B Driving Requirements & Features**
- **SDPS Subsystems**
- **CSMS Subsystems**
- **ECS Data Model**

Release B Driving Requirements and New Features



Driving Requirements

Support all Release A functionality plus:
Enhanced user functionality

Order-of-magnitude more data

- Push - Rel A: 52GB/Day Rel B: 1TB/Day

Distributed production dependencies

Distributed coincident queries

Improved administration and control

Decentralized system administration

Billing and accounting

Additional external interfaces and APIs

Support test and production modes

New Features

Release B client

ESQL

Subset, subsample, average

ASTER DAR client tool

WEB access to basic services

On-demand processing

Production subsetting

Predictive staging

High speed network (HiPPI)

Cross-DAAC planning

DIM/LIM architecture

Request tracking

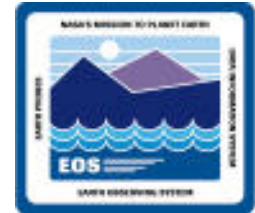
Enhanced mgmt environment

Multi-cell DCE architecture

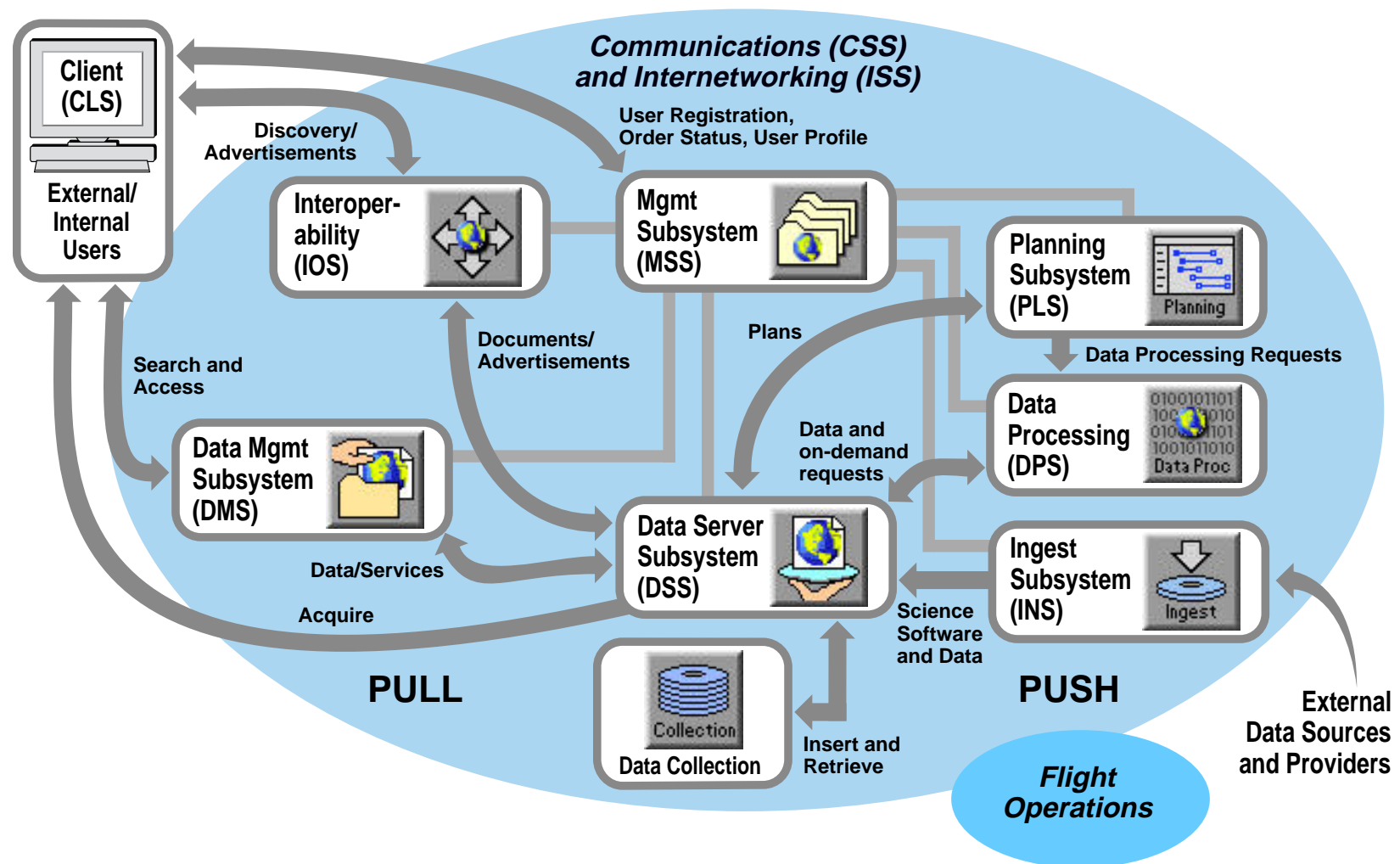
Costing and pricing services

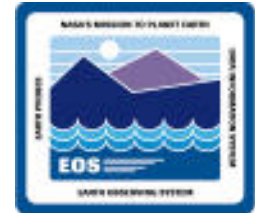
ASTER interoperability

Mode management

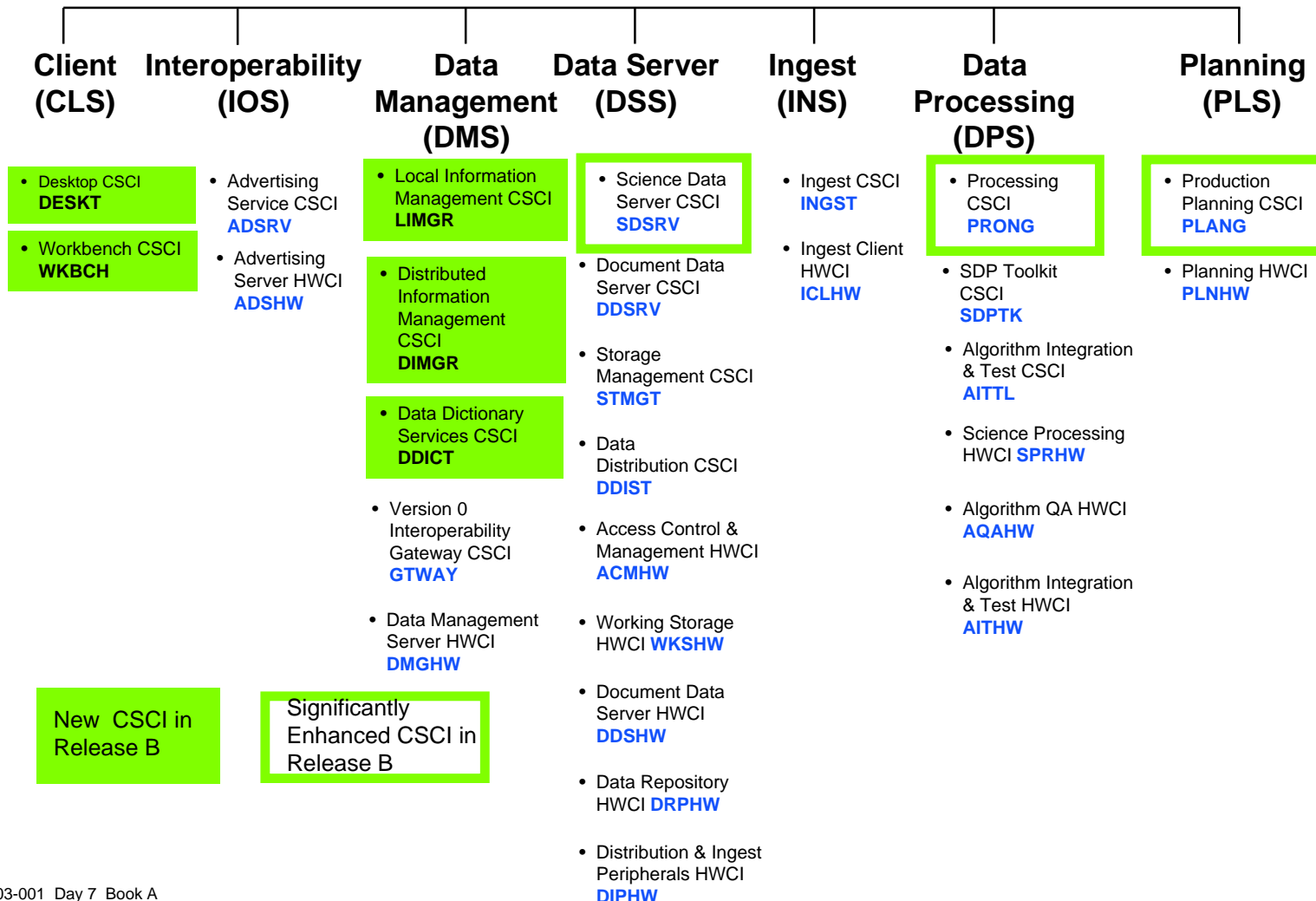


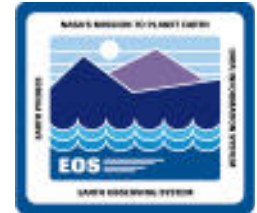
SDPS Subsystems Context



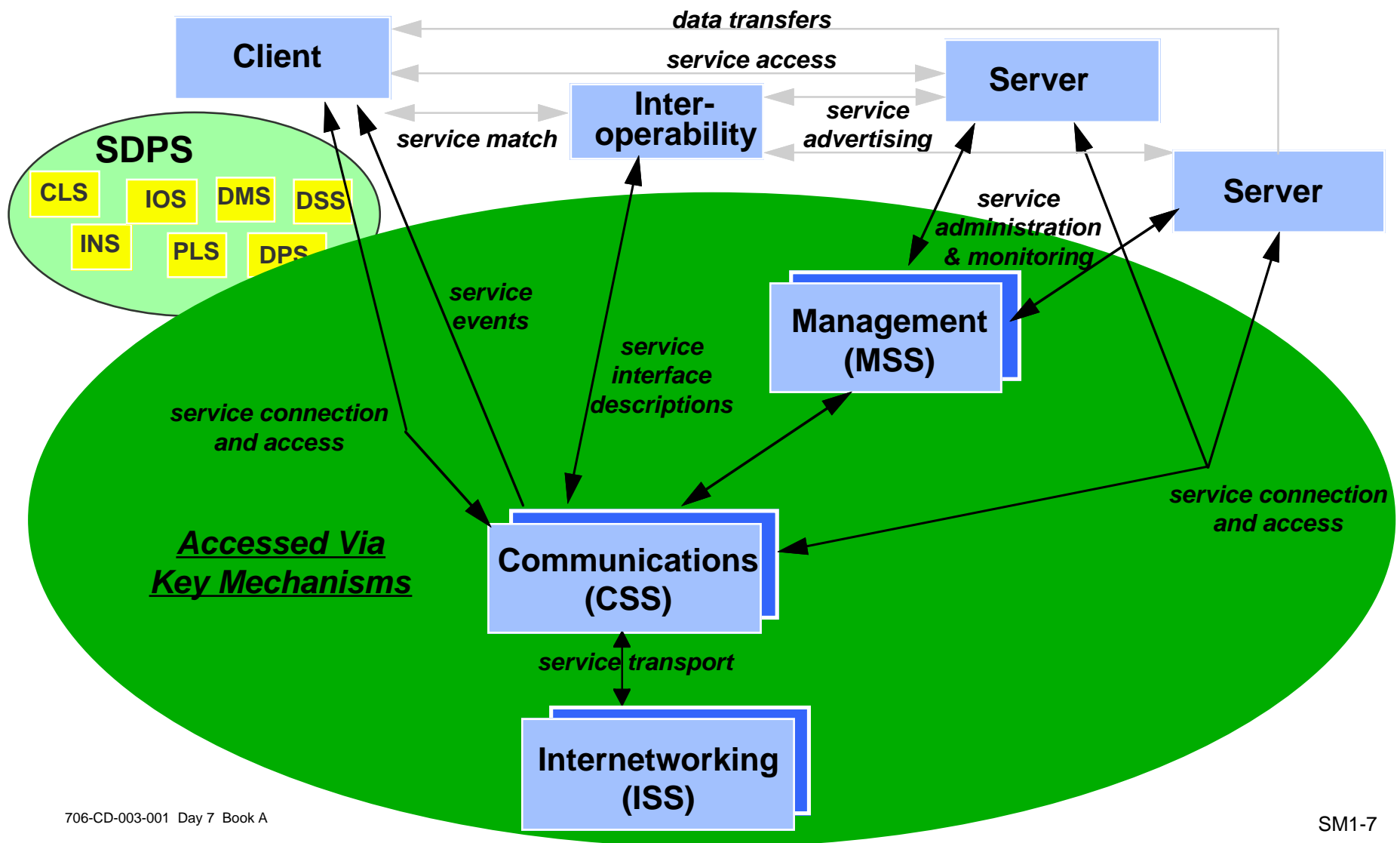


SDPS CI Overview



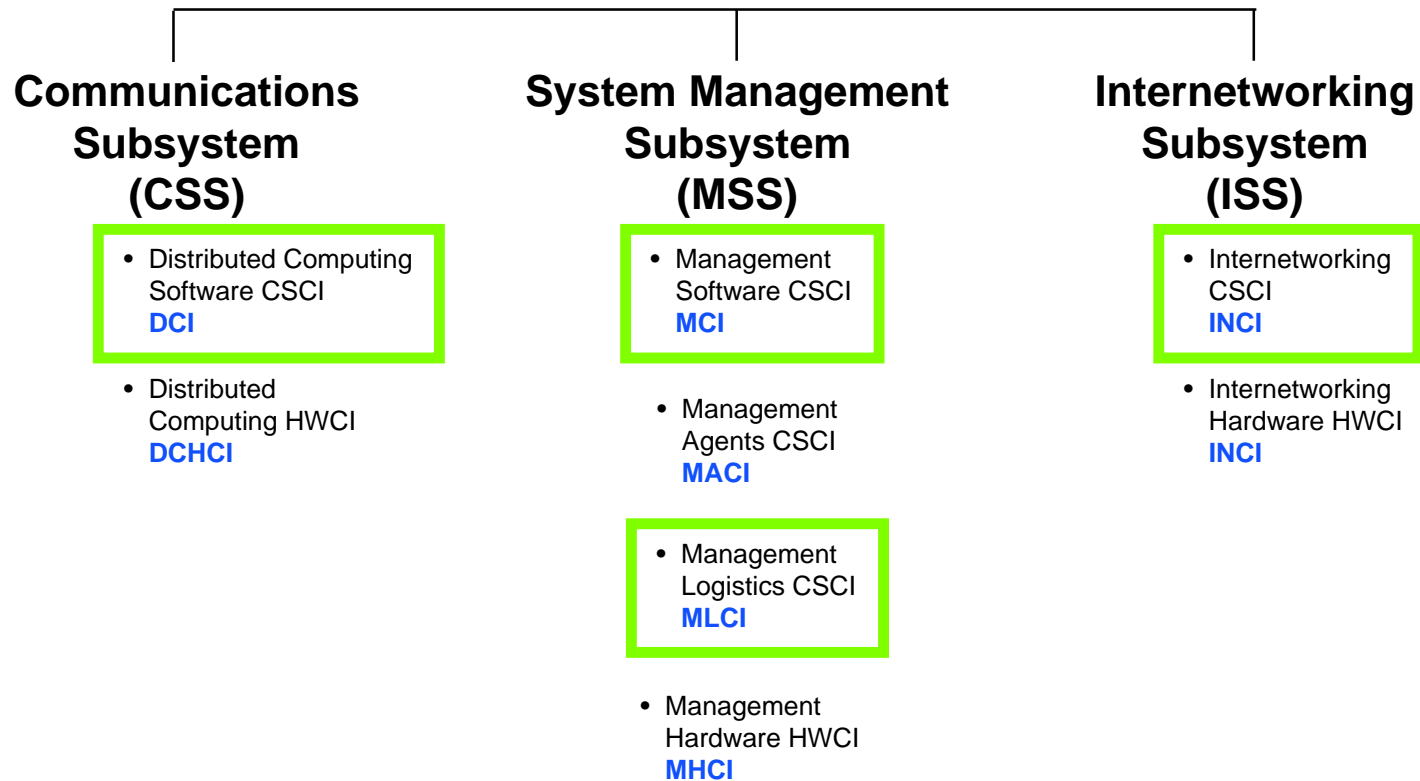


CSMS Subsystems





CSMS CI Overview



Significantly
Enhanced CSCI in
Release B



ECS Data Model

